

Resources

A Multivariate Time Series Guide to Forecasting and Modeling (with Python codes)

<https://www.analyticsvidhya.com/blog/2018/09/multivariate-time-series-guide-forecasting-modeling-python-codes/>

Stationarity and Memory in Financial Markets

<https://medium.com/pit-ai-technologies/non-stationarity-and-memory-in-financial-markets-4b8d1200667c>

How to Create an ARIMA Model for Time Series Forecasting in Python

<https://machinelearningmastery.com/arima-for-time-series-forecasting-with-python/>

How to Make Manual Predictions for ARIMA Models with Python

<https://machinelearningmastery.com/make-manual-predictions-arima-models-python/>

Understand Time Series Forecast Uncertainty Using Confidence Intervals with Python

<https://machinelearningmastery.com/time-series-forecast-uncertainty-using-confidence-intervals-python/>

A Gentle Introduction to Autocorrelation and Partial Autocorrelation

<https://machinelearningmastery.com/gentle-introduction-autocorrelation-partial-autocorrelation/>

Multivariate Time Series Forecasting with LSTMs in Keras

<https://machinelearningmastery.com/multivariate-time-series-forecasting-lstms-keras/>

How to Prepare Univariate Time Series Data for Long Short-Term Memory Networks

<https://machinelearningmastery.com/prepare-univariate-time-series-data-long-short-term-memory-networks/>

How to Convert a Time Series to a Supervised Learning Problem in Python

<https://machinelearningmastery.com/convert-time-series-supervised-learning-problem-python/>

4 Common Machine Learning Data Transforms for Time Series Forecasting

<https://machinelearningmastery.com/machine-learning-data-transforms-for-time-series-forecasting/>

How to Use Features in LSTM Networks for Time Series Forecasting

<https://machinelearningmastery.com/use-features-lstm-networks-time-series-forecasting/>

4 Strategies for Multi-Step Time Series Forecasting

<https://machinelearningmastery.com/multi-step-time-series-forecasting/>

A Gentle Introduction to Generative Adversarial Networks (GANs)

<https://machinelearningmastery.com/what-are-generative-adversarial-networks-gans/>

Stacked Long Short-Term Memory Networks

<https://machinelearningmastery.com/stacked-long-short-term-memory-networks/>

How to Develop LSTM Models for Time Series Forecasting

<https://machinelearningmastery.com/how-to-develop-lstm-models-for-time-series-forecasting/>

Best Resources for Getting Started With Generative Adversarial Networks (GANs)

<https://machinelearningmastery.com/resources-for-getting-started-with-generative-adversarial-networks/>

LSTM Network for Regression

<https://www.kaggle.com/byronvinu/lstm-network-for-regression>

Lag Plot: Definition, Examples

<https://www.statisticshowto.datasciencecentral.com/lag-plot/>

Time Series Analysis Tutorial with Python

<https://www.datacamp.com/community/tutorials/time-series-analysis-tutorial>

Understanding LSTM Networks

<https://colah.github.io/posts/2015-08-Understanding-LSTMs/>

Stock Prediction using LSTM Recurrent Neural Network

<https://www.youtube.com/watch?v=zwqwlR48ztQ>

Technical Analysis Library in Python

<https://technical-analysis-library-in-python.readthedocs.io/en/latest/index.html>

Machine Learning Techniques applied to Stock Price Prediction

<https://towardsdatascience.com/machine-learning-techniques-applied-to-stock-price-prediction-6c1994da8001>

Optimizing deep learning trading bots using state-of-the-art techniques

<https://towardsdatascience.com/using-reinforcement-learning-to-trade-bitcoin-for-massive-profit-b69d0e8f583b>

Creating Bitcoin trading bots that don't lose money

<https://towardsdatascience.com/creating-bitcoin-trading-bots-that-dont-lose-money-2e7165fb0b29>

A Gentle Introduction to Handling a Non-Stationary Time Series in Python
<https://www.analyticsvidhya.com/blog/2018/09/non-stationary-time-series-python/>

How to Use Power Transforms for Time Series Forecast Data with Python
<https://machinelearningmastery.com/power-transform-time-series-forecast-data-python/>

How I used ML to predict Bitcoin Prices
<https://medium.com/swlh/how-i-used-ml-to-predict-bitcoin-prices-82af7c655092>

Time Series Analysis for Financial Data V — ARIMA Models
<https://medium.com/auquan/time-series-analysis-for-finance-arma-models-acb5e39999df>

Time Series Analysis for Financial Data I— Stationarity, Autocorrelation and White Noise
<https://medium.com/auquan/time-series-analysis-for-financial-data-part-1-stationarity-autocorrelation-and-white-noise-1a1cc2fb23f2>

Time Series Analysis for Financial Data IV— ARMA Models
<https://medium.com/auquan/time-series-analysis-for-finance-arma-models-21695e14c999>

Time Series Analysis for Financial Data II — Auto-Regressive Models
<https://medium.com/auquan/time-series-analysis-ii-auto-regressive-models-d0cb1a8a7c43>

Time Series Analysis for Financial Data II — Auto-Regressive Models
<https://medium.com/auquan/time-series-analysis-ii-auto-regressive-models-d0cb1a8a7c43>

Time Series Analysis for Financial Data III— Moving Average Models
<https://medium.com/auquan/time-series-analysis-for-financial-data-iii-moving-average-models-ccf027f264e>

How To Identify Patterns in Time Series Data: Time Series Analysis
<http://www.statsoft.com/Textbook/Time-Series-Analysis>

Shape matching with time series data
<https://roamanalytics.com/2016/11/28/shape-matching-with-time-series-data/>

Time series Forecasting — ARIMA models
<https://towardsdatascience.com/time-series-forecasting-arma-models-7f221e9eee06>

Forecasting stock returns: What signals matter, and what do they say now?
<https://personal.vanguard.com/pdf/s338.pdf>

Adjusting Prices for Inflation in Python with Pandas Merge
<https://towardsdatascience.com/adjusting-prices-for-inflation-in-pandas-daaaaa782cd89>

Predicting Stock Price with LSTM

<https://towardsdatascience.com/predicting-stock-price-with-lstm-13af86a74944>

Using the latest advancements in deep learning to predict stock price movements

<https://towardsdatascience.com/aifortrading-2edd6fac689d>

How to Accelerate Learning of Deep Neural Networks With Batch Normalization

<https://machinelearningmastery.com/how-to-accelerate-learning-of-deep-neural-networks-with-batch-normalization/>

Boxcox transform on train & test data

<https://www.kaggle.com/ratman/boxcox-transform-on-train-test-data>

Feature Importance and Feature Selection With XGBoost in Python

<https://machinelearningmastery.com/feature-importance-and-feature-selection-with-xgboost-in-python/>

Time Series Prediction

https://www.youtube.com/watch?v=d4Sn6ny_5LI

How to Develop Machine Learning Models for Multivariate Multi-Step Air Pollution Time Series Forecasting

<https://machinelearningmastery.com/how-to-develop-machine-learning-models-for-multivariate-multi-step-air-pollution-time-series-forecasting/>

Just another AI trying to predict the stock market: Part 1

<https://towardsdatascience.com/just-another-ai-trying-to-predict-the-stock-market-part-1-d0663673a30e>

Forecasting Stock Returns Using ARIMA Model

<https://blog.quantinsti.com/forecasting-stock-returns-using-arima-model/>

An Interactive Introduction to Fourier Transforms

<http://www.jezzamon.com/fourier/>

Moving Averages

<https://www.daytrading.com/moving-averages>

Autoregressive Integrated Moving Average ARIMA(p, d, q) Models for Time Series Analysis

<https://www.quantstart.com/articles/Autoregressive-Integrated-Moving-Average-ARIMA-p-d-q-Models-for-Time-Series-Analysis>

Using Python and Auto ARIMA to Forecast Seasonal Time Series

<https://medium.com/@josemarcialportilla/using-python-and-auto-arma-to-forecast-seasonal-time-series-90877adff03c>
<https://www.rdocumentation.org/packages/forecast/versions/7.3/topics/auto.arma>
http://www.alkaline-ml.com/pmdarima/0.9.0/modules/generated/pyramid.arma.auto_arma.html

Generating Financial Series with Generative Adversarial Networks

<https://quantdare.com/generating-financial-series-with-generative-adversarial-networks/>

Stock Market Prediction on High-Frequency Data Using Generative Adversarial Nets

<https://www.hindawi.com/journals/mpe/2018/4907423/>

Using the latest advancements in AI to predict stock market movements

<https://github.com/borisbanushev/stockpredictionai>

<https://towardsdatascience.com/aifortrading-2edd6fac689d>

REAL-VALUED (MEDICAL) TIME SERIES GENERATION WITH RECURRENT CONDITIONAL GANS

<https://arxiv.org/pdf/1706.02633.pdf>

Predict Stock Prices Using RNN: Part 1

<https://lilianweng.github.io/lil-log/2017/07/08/predict-stock-prices-using-RNN-part-1.html>

Predicting stock market crashes

<https://towardsdatascience.com/predicting-stock-market-crashes-with-statistical-machine-learning-techniques-and-neural-networks-bb66bc3e3ccd>

Stock Prices Prediction Using Machine Learning and Deep Learning Techniques (with Python codes)

<https://www.analyticsvidhya.com/blog/2018/10/predicting-stock-price-machine-learning-and-deep-learning-techniques-python/>

Deep Learning the Stock Market

<https://medium.com/@TalPerry/deep-learning-the-stock-market-df853d139e02>

How to Train a GAN? Tips and tricks to make GANs work

<https://github.com/soumith/ganhacks>

Build High Performance Time Series Models using Auto ARIMA in Python and R

<https://www.analyticsvidhya.com/blog/2018/08/auto-arma-time-series-modeling-python-r/>

A comprehensive beginner's guide to create a Time Series Forecast (with Codes in Python)

https://www.analyticsvidhya.com/blog/2016/02/time-series-forecasting-codes-python/?utm_source=blog&utm_medium=stockmarketpredictionarticle

PREDICTING AND BEATING THE STOCK MARKET WITH MACHINE LEARNING AND TECHNICAL ANALYSIS

<http://www.icommercecentral.com/open-access/predicting-and-beating-the-stock-market-with-machine-learning-and-technical-analysis.php?aid=86901>

Electrocardiogram generation with a bidirectional LSTM-CNN generative adversarial network

<https://www.nature.com/articles/s41598-019-42516-z>

Wasserstein GAN

<https://arxiv.org/pdf/1701.07875.pdf>

Unsupervised Stock Market Features Construction using Generative Adversarial Networks(GAN)

<https://github.com/MiloMallo/StockMarketGAN>

Generative Adversarial Nets

<https://arxiv.org/pdf/1406.2661.pdf>

Stock Prediction with ML: Feature Selection

https://alphascientist.com/feature_selection.html

ARIMA Model – Complete Guide to Time Series Forecasting in Python

<https://www.machinelearningplus.com/time-series/arma-model-time-series-forecasting-python/>

Time Series Forecasting with LSTMs and Prophet

<https://towardsdatascience.com/time-series-forecasting-with-lstms-and-prophet-predict-your-email-workload-48bf9cdb1580>

Stock Market Predictions with LSTM in Python

<https://www.datacamp.com/community/tutorials/lstm-python-stock-market>

Time-series data analysis using LSTM (Tutorial)

<https://www.kaggle.com/amirrezaeian/time-series-data-analysis-using-lstm-tutorial>

Predicting stock prices with LSTM

<https://medium.com/neuronio/predicting-stock-prices-with-lstm-349f5a0974d4>

Prediction of Closing Price of Stock LSTM

<https://github.com/alexavierc/LSTM-Stock-Prices/blob/master/LSTM%20Single%20Company.ipynb>

How to Use the TimeDistributed Layer for Long Short-Term Memory Networks in Python

<https://machinelearningmastery.com/timedistributed-layer-for-long-short-term-memory-networks-in-python/>

StockMarketGAN

<https://nmharmon8.github.io/StockMarketGAN/>

Stock Market Prediction by Recurrent Neural Network on LSTM Model

<https://blog.usejournal.com/stock-market-prediction-by-recurrent-neural-network-on-lstm-model-56de700bff68>

Using a Keras Long Short-Term Memory (LSTM) Model to Predict Stock Prices

<https://heartbeat.fritz.ai/using-a-keras-long-shortterm-memory-lstm-model-to-predict-stock-price-s-a08c9f69aa74>

Multivariate Time Series Imputation with Generative Adversarial Networks

<https://papers.nips.cc/paper/7432-multivariate-time-series-imputation-with-generative-adversarial-networks.pdf>

Generative Models

<https://github.com/wiseodd/generative-models>

Get Started with Using CNN+LSTM for Forecasting

<https://towardsdatascience.com/get-started-with-using-cnn-lstm-for-forecasting-6f0f4dde5826>

Deep Learning for Time Series

<https://machinelearningmastery.com/category/deep-learning-time-series/>

How to Develop Convolutional Neural Network Models for Time Series Forecasting

<https://machinelearningmastery.com/how-to-develop-convolutional-neural-network-models-for-time-series-forecasting/>

Deep Learning — Generative Adversarial Network(GAN)

<https://medium.com/datadriveninvestor/deep-learning-generative-adversarial-network-gan-34abb43c0644>

Generative Adversarial Network(GAN) using Keras

<https://medium.com/datadriveninvestor/generative-adversarial-network-gan-using-keras-ce1c05cfd3>

Generative Adversarial Networks Time Series Models to Forecast Medicine Daily Sales in Hospital

<http://jurnal.polgan.ac.id/index.php/sinkron/article/view/10044/188>

Stock Market Prediction Based on Generative Adversarial Network

<https://www.sciencedirect.com/science/article/pii/S1877050919302789?openDownloadIssueModal=true>

GAN with Keras: Application to Image Deblurring

<https://blog.sicara.com/keras-generative-adversarial-networks-image-deblurring-45e3ab6977b5>

GAN by Example using Keras on Tensorflow Backend

<https://towardsdatascience.com/gan-by-example-using-keras-on-tensorflow-backend-1a6d515a60d0>

How to Grid Search Deep Learning Models for Time Series Forecasting

<https://machinelearningmastery.com/category/deep-learning-time-series/>

GAN with Keras: Application to Image Deblurring

<https://blog.sicara.com/keras-generative-adversarial-networks-image-deblurring-45e3ab6977b5>

Generative Adversarial Networks: Generate images using Keras GAN [Tutorial]

<https://hub.packtpub.com/generative-adversarial-networks-using-keras/>

Understanding Generative Adversarial Networks

<https://towardsdatascience.com/understanding-generative-adversarial-networks-4dafc963f2ef>

Collection of generative models, e.g. GAN, VAE in Pytorch and Tensorflow

<https://github.com/wiseodd/generative-models>

How to debug neural networks. Manual.

<https://medium.com/machine-learning-world/how-to-debug-neural-networks-manual-dc2a200f10f2>

A Beginner's Guide to Generative Adversarial Networks (GANs)

<https://skymind.ai/wiki/generative-adversarial-network-gan>

Generative Adversarial Networks (GANs) — A Beginner's Guide

<https://towardsdatascience.com/generative-adversarial-networks-gans-a-beginners-guide-5b38ecee24>

Implementing GAN & DCGAN with Python

<https://rubikscore.net/2018/12/17/implementing-gan-dcgan-with-python/>

Keras Conv1D: Working with 1D Convolutional Neural Networks in Keras

<https://missinglink.ai/guides/deep-learning-frameworks/keras-conv1d-working-1d-convolutional-neural-networks-keras/>

Deep Convolutional Generative Adversarial Network

<https://www.tensorflow.org/beta/tutorials/generative/dcgan>

How model.trainable = False works in keras (GAN model)

<https://gist.github.com/naotokui/a9274f12af9d946e99b6df73a5d2af6d>

Understanding and optimizing GANs (Going back to first principles)

<https://towardsdatascience.com/understanding-and-optimizing-gans-going-back-to-first-principles-e5df8835ae18>

A tensorflow implementation of "Deep Convolutional Generative Adversarial Networks"

<https://github.com/carpedm20/DCGAN-tensorflow>

Time Series Forecasting Performance Measures With Python

<https://machinelearningmastery.com/time-series-forecasting-performance-measures-with-python/>

Graduating in GANs: Going from understanding generative adversarial networks to running your own

<https://towardsdatascience.com/graduating-in-gans-going-from-understanding-generative-adversarial-networks-to-running-your-own-39804c283399>

GAN — GAN Series (from the beginning to the end)

https://medium.com/@jonathan_hui/gan-gan-series-2d279f906e7b

7 Popular Technical Indicators and How to Use Them to Increase Your Trading Profits

<https://medium.com/@harrynicholls/7-popular-technical-indicators-and-how-to-use-them-to-increase-your-trading-profits-7f13ffeb8d05>

The Multiple faces of 'Feature importance' in XGBoost

<https://towardsdatascience.com/be-careful-when-interpreting-your-features-importance-in-xgboost-6e16132588e7>

How To Backtest Machine Learning Models for Time Series Forecasting

<https://machinelearningmastery.com/backtest-machine-learning-models-time-series-forecasting/>

Comparison Classical and Machine Learning Algorithms for Time Series Forecasting

<https://machinelearningmastery.com/findings-comparing-classical-and-machine-learning-methods-for-time-series-forecasting/>

Neural network forecasting for seasonal and trend time series

https://www.researchgate.net/publication/4871997_Neural_network_forecasting_for_seasonal_and_trend_time_series

Can Neural Networks Predict Price Movements?

<https://blog.usejournal.com/can-neural-networks-predict-price-movements-d1f6d4754c7c>

Seasonal ARIMA with Python

<https://www.seanabu.com/2016/03/22/time-series-seasonal-ARIMA-model-in-python/>

How (not) to use Machine Learning for time series forecasting: Avoiding the pitfalls

<https://towardsdatascience.com/how-not-to-use-machine-learning-for-time-series-forecasting-avoiding-the-pitfalls-19f9d7adf424>

Reducing Mode Collapse in GANs using Guided Latent Spaces

<https://medium.com/intel-student-ambassadors/reducing-mode-collapse-in-gans-using-guided-latent-spaces-36f52a08a668>

Mode collapse in GANs

<https://aiden.nibali.org/blog/2017-01-18-mode-collapse-gans/>

GAN — Why it is so hard to train Generative Adversarial Networks!

https://medium.com/@jonathan_hui/gan-why-it-is-so-hard-to-train-generative-adversarial-networks-819a86b3750b